Park Fitness Equipment Plan

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i. Executive summary

The City of Sydney's *Park Fitness Equipment Plan 2015* reflects the Council's commitment to establishing a comprehensive network of outdoor fitness equipment facilities across parks and open spaces in the local government area to complement existing installations. This plan identifies suitable sites and equipment for future outdoor fitness equipment facilities and guides the prioritisation of future projects. The proposed facilities will seek to deliver on Sustainable Sydney 2030 objectives to create vibrant local communities and to enhance the role of parks and open space in public life.

The strategic objectives of this plan are to:

- 1. Increase provision of outdoor fitness equipment:
- 2. Encourage greater participation in physical activity;
- 3. Prioritise installation of outdoor fitness equipment; and
- 4. Engage the community.

It describes different types of physical activity and exercise as well as outdoor fitness equipment types and layout configurations. The plan gives the results of individual site assessments, which were carried out to review contemporary provision of outdoor fitness equipment facilities and to determine the quantity, distribution, diversity and quality of facilities within the City of Sydney Local Government Area (LGA).

These assessments identified:

- Gaps in the City's existing outdoor fitness equipment network;
- Potential sites for new outdoor fitness equipment;
- Existing outdoor fitness equipment facilities suitable for upgrade; and
- Design guidelines for appropriate siting, provision and management of outdoor fitness equipment facilities.

Potential sites for new outdoor fitness equipment were rigorously assessed and the community consulted before a shortlist of recommendations was developed. Sites proposed as part of the Park Fitness Equipment Program include:

- 1. Turruwul Park, Rosebery;
- 2. Alexandria Park, Alexandria;
- 3. Waterloo Park, Waterloo;
- 4. Observatory Hill Park, Millers Point (upgrade existing);
- 5. Pirrama Park, Pyrmont; and
- 6. South Sydney Rotary Park, Eveleigh (replace existing).

Installing outdoor fitness equipment at these sites will help to achieve the strategic objectives laid out in this plan by expanding and improving the City's network of outdoor fitness equipment facilities.

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1. Introduction

1.1 Background

In 2014, the Australian Government's Department of Health published revised guidelines for physical activity and sedentary behaviour. The guidelines state that adults should accumulate at least 150 minutes per week of moderate intensity physical activity or at least 75 minutes of more vigorous physical activity.

It recommends that children and young people under the age of 18 years undertake at least 60 minutes of physical activity per day. All age groups should engage in activities that strengthen muscle and bone on a regular basis.

However, research shows that only 40% of Australian adults did more than the recommended 30 minutes of moderate intensity physical activity per day (ABS 2012). Only one-third of children, and one in ten young people undertook the recommended 60 minutes of physical activity every day (ABS 2012).

According to the World Health Organisation, physical inactivity is the fourth leading cause of death due to non-communicable diseases worldwide. Chronic illnesses, including cardiovascular disease (that causes heart attacks and strokes), diabetes and cancer, contribute to over three million preventable deaths annually (Troy 2014).

Physical inactivity is second only to tobacco smoking in its contribution to the cancer burden in Australia (Troy 2014).

Moving more and sitting less is associated with a range of health benefits, including lower risk of cardiovascular disease, type 2 diabetes and some cancers. Engaging in regular physical activity will also help to maintain or improve blood pressure, cholesterol, blood sugar levels and overall physical and mental wellbeing.

A review of qualitative studies by Allender found that while a high proportion of people are not exercising at the recommended rates, there is a desire amongst many of those surveyed to increase the amount of physical activity that they take part in (Foster et al 2005).

One of the challenges in addressing this issue is to understand what activities or interventions are successful at encouraging people to engage in, or to continue with, physical activity. This may include factors such as increasing opportunities and removing barriers to physical activity in order to generate behavioural change.



Figure 1. - Facilities provide for a range of physical activities at Sydney Park, St Peters. (Photo JILA)

1.2 Barriers to participation in physical activity

There are internal and external barriers to people participating in physical activity.

Internal barriers include:

- Age;
- Health status;
- Fitness level:
- Fear of injury or falling;
- Anxiety and lack of confidence; and
- Lack of time.

External barriers include:

- Cost:
- Poor access to facilities:
- Unsafe environments;
- Culturally inappropriate programmes;
- Inadequate or poorly maintained facilities;
- Social stigma and stereotypes; and
- Lack of information or knowledge.

To overcome these barriers, it is important to recognise people have different needs, motivations and abilities in relation to physical activity. For facilities to be cost effective and successful, they need to be appropriate for people of different ages, gender, health, fitness level, experience and ability.

1.3 Public open space, exercise and health

Providing quality public open space that is safe, friendly and inclusive has been found to be beneficial for both mental and physical health. Combined with the appropriate supporting infrastructure, it can encourage people to do regular physical activity and help to further improve overall health and wellbeing.

A systematic review by Gladwell et al. (2013) suggests that physical activity, which is conducted in a natural or green environment, causes greater feelings of revitalisation and positive engagement (Thompson Coon et al. 2011). In addition, outdoor physical activity has also been shown to relieve tension, anger, and depression and improve self-esteem (Barton et al. 2009). Gladwell also presents preliminary evidence, which suggests that exercising whilst exposed to nature might have a useful role in primary and secondary prevention of disease.

Finally, encouraging sedentary individuals to exercise outdoors can be an effective way of improving adherence rates to training programmes (Hug et al. 2009).

It is important, therefore, that public open space and the facilities within are safe, accessible, aesthetically pleasing, well provisioned and well maintained to attract users. Quality must be sustained over time to ensure continual use and ongoing benefit to the community.

1.4 Outdoor fitness equipment

Outdoor fitness equipment, in the context of this plan, means exercise facilities located outdoors in parks and public open space. The facilities can be compared to fitness equipment in a gym. However, the equipment is outdoors, free for the public to access and available for use all of the time. Outdoor fitness equipment typically includes pieces of exercise equipment grouped together or spread along a trail in a park or public open space.

Outdoor fitness equipment provides a variety of benefits to both users and the community including:

- Improved physical and psychological health (Chow 2013);
- Greater social capital; people often socialise while exercising, strengthening community

- and interpersonal relationships. These relationships may then support increased use as participants offer encouragement, motivation and support to each other (Chow 2013);
- Greater level of activity within parks and public open space, which increases passive surveillance and discourages antisocial behaviour and vandalism;
- Enabling more effective exercise, as natural surroundings and fresh air in an outdoor environment help make exercise more fun and therefore more effective (Thompson Coon 2011);
- Improved agility, balance, coordination and muscular and bone strength;
- Expansion of the benefits associated with physical activity to a wider audience. Facilities promote growth of a healthy community and influence the behaviour of other park users; and
- Relieving the pressure placed on park infrastructure and furniture not intended for physical activity. Targeted facilities provide a designated area for people to use within parks and public open space.

In addition, free use of equipment at any hour removes many of the financial and time barriers that may prevent people exercising. This is particularly important for communities with lower socioeconomic backgrounds.

1.5 Outdoor fitness equipment in the City of Sydney

As identified in the City's Open Space and Recreation Needs Study in 2007, there is a need for equitable distribution and increased provision of accessible, safe and free sport and active recreation facilities, such as outdoor fitness equipment.

The City recognises that members of the community can be encouraged to participate in physical activity and improve their overall health and fitness through provision of outdoor fitness equipment in parks and public open space.

A number of parks and public open space across the City currently contain outdoor fitness equipment. This plan reviews the types of facilities provided and patronage of existing equipment in order to identify the types of equipment and layout preferred by user groups.

A review of existing fitness equipment indicates that there are areas of the City of Sydney local government area (LGA) that do not have equipment within a reasonable walking distance. The plan identifies areas where new fitness equipment could be located or existing facilities improved, to provide resources that can be easily accessed by all members of the community.

The City encourages community members to walk, jog or cycle to outdoor recreational facilities. This is not only good for the health of individuals, but also has environmental benefits and can result in better social interactions for the community.



Figure 2. - Outdoor fitness equipment trail at Wentworth Park, Glebe. (Photo JILA)

2. About this plan

2.1 Background

This plan explores the provision of fitness equipment in public open space in the City. The ambitious program of park and public space upgrades undertaken by the City demonstrates its commitment to provide improved public domain and recreation facilities for the community. This plan is a continuation of this commitment, considering physical activity and access to outdoor fitness equipment to complement existing assets and provide a diverse range of recreational pursuits. It will guide future installation of outdoor fitness equipment to provide facilities for the whole community.

2.2 Need for the plan

The *Park Fitness Equipment Plan* has provided the opportunity to undertake a comprehensive assessment and review of the City's existing outdoor fitness equipment facilities, in order to:

- Identify the provision and condition of existing outdoor fitness equipment facilities, including equipment that requires repair, replacement, augmentation or relocation to a more suitable position:
- Identify potential sites, and locations within those sites, for new outdoor fitness equipment;
- Respond to forecast increases and changes in the population distribution, density and profile;
- Ensure trends in outdoor physical activity and fitness training are considered and accommodated, where possible; and
- Ensure best practice planning and design of outdoor fitness equipment facilities.

2.3 Plan aims and objectives

The aim of the plan is to provide the City with a strategic direction and framework for the installation of outdoor fitness equipment within parks and public open space over the next five years. The strategic objectives of the plan are to:

1. Increase provision of outdoor fitness equipment -

so that all members of the community are within a 10-minute walking distance (800 metre radius) of outdoor fitness equipment.

2. Encourage greater participation in physical activity -

to help all members of the community reach their recommended levels of physical activity.

3. Prioritise installation of outdoor fitness equipment -

to ensure areas with greatest walking distance from existing outdoor fitness equipment are provided for in the next five years.

4. Engage the community -

to ensure outdoor fitness equipment facilities meet the needs of the community and promote greater social inclusion.

2.4 Purpose of the plan

This plan:

- Outlines the assessment of existing facilities within the local government area;
- Considers parks and public open space where new facilities could be provided;
- Undertakes a qualitative assessment of each site identified;
- Provides a ranking of the sites to guide future staging and implementation;
- Provides an overview of the various equipment types; and
- Provides an overview of the options for equipment layout.

This plan enables the City to consider the needs and desires of a number of stakeholders, including:

- All community members, ensuring an equitable use of park and public open space;
- Individuals with a desire to undertake physical activity and personal fitness outdoors;
- Personal trainers and organised training groups; and
- Park and open space asset managers, ensuring an understanding of the requirements for the maintenance of existing facilities and installation of new outdoor fitness equipment.

2.5 Complementary strategies

The City has developed complementary strategies for the management of public open space and outdoor recreation facilities. These strategies include the:

- Draft Outdoor Fitness Training Code of Conduct seeking fair access to public land for fitness trainers in harmony with other recreational activities and the rights of residents and the public;
- Open Space Recreation Needs Study providing a strategic direction and framework to improve open space and recreation facilities;
- Generic Plan of Management Parks, Sportsgrounds, General Community Use Land outlining how the City will manage, use or develop community land:
- Draft Sports Facilities Demand Study assessing demand for indoor and outdoor sports facilities within the LGA, currently being compiled by the City;
- Sustainable Sydney 2030 Strategy outlining a number of objectives to ensure the City is green, global and connected;
- Cycle Strategy and Action Plan 2007-2017;
- Local environment plans;
- Development control plans;
- Specific park plans of management and master plans plus Parks Technical Manual;
- Greening Sydney Plan; and
- Tree management plans.



Figure 3. - Example of outdoor fitness equipment in Prince Alfred Park, Surry Hills. (Photo JILA)

3. Physical activity overview

3.1 What is physical activity?

Physical activity can be defined as any activity that gets your body moving, makes your breathing quicker and your heart beat faster (The Department of Health 2014). Physical activity can be broken down into two main categories:

Moderate intensity physical activity

These activities take some effort, but can still be done while talking. Brisk walking, recreational swimming, dancing, yoga and a number of household tasks, such as window cleaning and raking leaves, are examples of moderate intensity physical activity (The Department of Health 2014).

Vigorous intensity physical activity

These activities require more effort and an increased respiratory rate. Jogging, aerobics, fast cycling, weight training and many organised sports are examples of vigorous intensity physical activity (The Department of Health 2014).

3.2 What are the different types of exercise?

It is important to engage in a range of physical activity, including muscle strengthening, in order to reap maximum health benefits. Outdoor fitness equipment can help people to reach their recommended levels of moderate and vigorous intensity physical activity by incorporating the following four types of exercise.

Aerobic

Aerobic exercise, also known as endurance or cardiovascular exercise, is any exercise that involves continuous movements with large muscle groups and increases the heart and respiratory rate. Aerobic exercise, such as running, swimming and cycling, improves overall health and fitness making it easier to carry out everyday activities and prevent age related problems.

Anaerobic

Anaerobic exercise, also known as resistance or strength training, involves performing fewer, and more intense, muscle contractions than aerobic exercise. Anaerobic exercise, such as weight lifting or resistance band training, helps to increase bone strength and muscular fitness, as well as maintain muscle mass during a weight-loss programme. This type of exercise helps by increasing overall strength, making everyday weight-bearing activities easier. Building and maintaining muscle also helps to boost metabolism, prevent injury and raise mood.

Stability

Stability exercise is an integral part of any physical activity programme. Stability exercise, such as balance, agility and core training, targets muscular connections to the spine, pelvis and shoulders for greater control and posture during movement. This type of exercise connects the upper and lower body muscles, enabling them to work more effectively to protect the back and reduce the risk of falling.

Flexibility

Flexibility exercise enhances the range of motion of your muscle and joint movements (Cavazos 2015). Stretching and many yoga poses are effective forms of flexibility exercise. Prolonged muscle tightness, poor muscle recovery and bad posture can shorten muscles over time. Flexibility exercise stretches the muscles to help prevent shortening and subsequent injuries.

3.3 How do we design for exercise?

Best practice design for outdoor fitness equipment is based on three general principles.

1. Functional activities - find exercises that mimic day-to-day or naturally occurring movements that

involve large muscle groups and multiple joints.

- 2. Intensity match the intensity of the workout to the fitness level and objectives of the participant. High intensity training may be suitable for individuals that train regularly, have a higher fitness level or are more experienced in use of equipment. They can perform exercises in a variety of ways, for example high intensity interval training (HIIT) and circuit training. Moderate or low intensity training may be appropriate for participants that train intermittently, have a less developed fitness level or have not used facilities very often. Also individuals may vary the intensity of their training over time, for example in accordance with principles of periodisation the process of varying a training program at regular time intervals to bring about optimal gains in physical performance.
- 3. Increasing load find ways to use the equipment provided, as well as external equipment such as ropes, resistance bands and suspension training devices, to provide participants with a variety of body weight and weighted exercises.

4. Outdoor fitness

4.1 Equipment types

The need to provide greater opportunities for physical activity has seen an increasing number of outdoor fitness equipment suppliers enter the marketplace with a wide range of equipment and types. Some equipment is designed for a specific purpose, while others can be used for a variety of exercise types.

To categorise the many forms of exercise, materials and finishes that are available for outdoor fitness equipment, two types have been defined. They are:

- 1. Static equipment that has no moving parts; and
- **2.** Dynamic equipment, with moving parts activated by the weight of a user's body.

Static equipment

Static equipment can be used for all four types of exercise and in particular, open and closed kinetic chain movements (weight-bearing exercises, where users utilise their own body weight).

Static equipment provides the following opportunities:

- Functionality a variety of exercises can be performed using one piece of equipment for greater overall fitness;
- Customisation it can have other items, such as ropes and resistance bands, attached to it. This encourages people to use it for exercise instead of improvising with other park facilities, such as seats, light poles and fences.
- Flexibility it provides a flexible facility for those who
 are less mobile or with limited strength. People can
 adjust their degree of physical exertion themselves
 and are not required to exert a defined weight to
 operate the equipment;
- Cost effective it can be cheaper than dynamic equipment. This allows more equipment to be installed for the same amount of money;
- Robust it has minimal moving parts and is more suited to shoreline installations where the equipment can be subject to salt, sand and wind-exposure;
- Low maintenance it has minimal or no maintenance requirements; and
- It is suited to CrossFit exercising, which is rapidly growing in popularity (CrossFit exercise is a form of strength and conditioning that focuses on performing functional movements combined into high intensity, varied workouts).



Figure 4. - Static equipment at Wentworth Park, Glebe. (Photo JILA)



Figure 5. - Static equipment at Bondi Beach. (Photo JILA)



Figure 6. - Static equipment at Prince Alfred Park, Surry Hills. (Photo JILA)

Constraints of static equipment include:

- Knowledge the simple form of static equipment can make it difficult for new users to determine what exercise or movement the equipment is intended for; and
- Fitness level some pieces of static equipment, such as a pull-up bars, require an existing level of fitness in order to perform the intended exercise, which can exclude new and lower fitness level users.

Dynamic equipment

Dynamic equipment focuses on isokinetic movements: variable resistance to a movement, that no matter how much effort is exerted, the movement takes place at a constant speed.

Dynamic equipment provides the following opportunities:

- Aerobic it offers a greater selection of equipment for aerobic exercise than static equipment;
- Fitness level most dynamic equipment does not require an existing level of fitness, making it readily accessible to new and lower fitness level users;
- Accessibility many dynamic equipment suppliers offer a range of all abilities equipment;
- Innovation some dynamic equipment suppliers offer a green energy range, allowing users to convert human energy into usable electricity to power outdoor lighting and mobile devices; and
- Familiarity It mimics well-known indoor fitness equipment, such as treadmills and cross trainers, so the use may be obvious. However explanatory signage is still recommended for users who are unfamiliar with fitness equipment.

Constraints of dynamic equipment include:

- Play the movable equipment can be enticing to children for play, rather than intentional fitness training. This can occur when the equipment is located near a playground or other children's recreation space;
- Weather Extreme weather conditions and salt-laden wind in exposed harbour locations may impact on the lifespan and maintenance requirements for dynamic equipment;
- One size fits all the weight and resistance of equipment cannot be adjusted and the movement line is fixed, making it difficult for some users to use the equipment;
- Moving parts the moving parts of dynamic equipment make it more susceptible to failure and vandalism;



Figure 7. - Dynamic equipment at Arthur Byrne Reserve, Maroubra Beach. (Photo JILA)



Figure 8. - Dynamic equipment at Burrows Park, Clovelly. (Photo JILA)



Figure 9. - Dynamic equipment at Darling Quarter, Darling Harbour. (Photo JILA)

- Challenge the equipment may provide little or no challenge for experienced trainers; and
- Progression the equipment provides little opportunity for progressive overload or progressive resistance training (strength training where the load is constantly increased to facilitate adaptation).

Providing equipment that considers the needs of users will contribute to increased patronage of facilities. Outdoor fitness equipment can combine both static and dynamic equipment to provide for all exercise types and deliver a complete workout to users.

4.2 Other equipment

When a fitness trainer or an individual is able to incorporate external equipment into their routine it greatly increases the variety of training they can provide or partake in. It allows them to increase the load within an exercise session with minimal risk. Examples of external equipment that may be used in a facility, if council has installed equipment specifically for that purpose, include ropes, straps, resistance bands and suspension training devices.

It is important that these items are used only in designated outdoor fitness equipment stations on elements installed specifically for these items. External equipment must not adversely impact on other park users or damage facilities.

Horizontal and vertical poles can provide fixings or anchor points for equipment, such as ropes, cables, bands and suspension training devices, to discourage fixing to light posts or fences. Installing equipment such as slam ball walls, raised platforms or objects for box jumps, can discourage the use of stairs and walls.

Finally, proprietary outdoor fitness equipment can be paired with custom-built elements to suit the specific needs of a site.

4.3 Layout of Equipment

Similar to the layout in an indoor gymnasium, grouping pieces of fitness equipment together outdoors enables more varied exercise routines. It allows people to undertake a variety of targeted exercises and provides facilities for more than one person to exercise at the same time.

Outdoor fitness equipment can be grouped into three layout types: including a hub, cluster or spread along a trail.

Hub

A hub is one area containing a number of pieces of equipment.

Equipment located in a hub can:

- Benefit smaller sites where the equipment has to be concentrated in one area so that it doesn't interfere with other park users;
- Suit many locations, particularly where there is no existing path network; and
- Create a destination within a park for fitness training and help to activate underutilised spaces.

Cluster

A cluster consists of several areas, each containing a few pieces of equipment, grouped in close proximity on one site.

Equipment located in a cluster can:

- Help manage and prevent commandeering of all equipment by a group; and
- Enable the maximum amount of equipment to be installed while minimising the visual impact.

Trail

A trail consists of a number of pieces or groups of equipment spread along a path, track or trail over a distance. This linear spread may encourage people to run or jog between each 'station'.

Equipment located in a trail can:

- Complement the exercise routines of people already walking or jogging along an existing route;
- Benefit larger parks, especially parks where there is a recreation route. Equipment users may
 be interested in doing a circuit though a park. Alternatively, they may exercise by jogging before
 or after using the equipment, as part of their exercise routine.

In this plan, we have classified layout types as small or large fitness stations.

Small fitness stations

Smaller fitness stations generally contain around six pieces of equipment and contain a single piece of each equipment type provided. They do not contain multiples of the same pieces of equipment. Small fitness stations can be more readily incorporated in parks and open space areas and feel more approachable to individuals who wish to exercise.

Large fitness stations

Larger fitness stations contain six or more pieces of equipment. Like commercial gymnasiums, they provide more than one piece of each equipment type to enable multiple people to undertake the same exercises at the one time.

Similarly, larger fitness stations can contain multiple differently sized units so that they are suitable for people of a range of ages and sizes. For example, pull-up bars can be installed at various heights and dip bars at various heights and diameters. They can also support large groups. However, large groups can be daunting to some individuals, who wish to exercise, and may discourage patronage by these people.

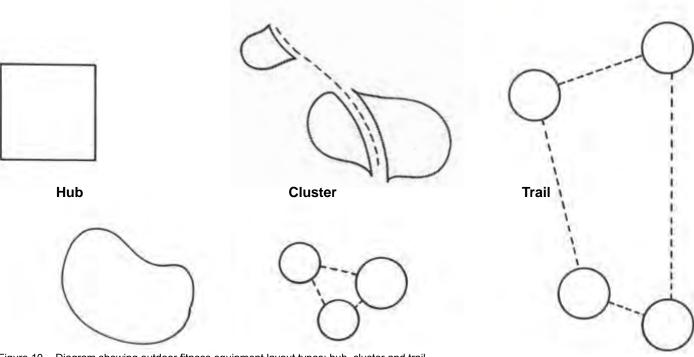


Figure 10. - Diagram showing outdoor fitness equipment layout types: hub, cluster and trail.

4.4 Surfacing and complementary Items

The surface around facilities should promote comfort and usability. This may include a combination of impact attenuating rubber softfall, grass and hard paving. Surfaces such as loose gravel and mulch are discouraged for comfort and maintenance reasons.

Expanded areas of rubber softfall and artificial turf without an impact attenuation layer can be a useful addition beyond the areas surrounding the proprietary equipment, which allows for a flexible use of space. It can accommodate activities such as yoga, Tai Chi and skipping, as well as providing additional space for external equipment.

Some other items can be provided to encourage use of facilities and make the experience as enjoyable as possible. These include:

- Signage indicating the various types and exercises that can be performed on the equipment;
- Drinking fountains, ideally with an outlet that can be used to fill drink bottles for those exercising;
- Bike racks to encourage people to cycle to the facilities and use bicycles as part of their overall fitness routine;
- Seating to make the experience more enjoyable, to place personal items while exercising and to provide a comfortable place to rest;
- Additional tree planting or structures to provide shade, so people can exercise protected from the sun and avoid overexposure to heat; and
- Public toilets close by.

4.5 Design Considerations

Aligning outdoor fitness equipment selection to cover all four types of exercise (aerobic, anaerobic, stability and flexibility) is critical for ensuring a total body workout and complete fitness routine. Equally important are a variety of design guidelines. To help support the planning process the following design guidelines should be used to ensure the various design best practices have been addressed to meet the needs of the intended users and site.

- Engage the community during the planning process in order to meets the needs of individuals and groups of young people, adults, older people and those with disabilities;
- Identify the target demographic or demographics e.g. beginner, intermediate or advanced exercisers;
- Consider the site location and context to ensure equipment is visible, accessible and appropriate to its setting;
- Implement universal design to accommodate both mobility devices and multiple users. This will help to promote comfort, usability and inclusion for people of all abilities;
- Choose a variety of equipment, which accommodates all types of exercise and a range of physical activity;
- Space equipment in a logical sequence, which enables users to plan and time their movement through the fitness station, in accordance with their individual workout routine, training programme and methodologies;
- Identify the anticipated demand and patronage of the equipment types. Where possible, provide more than one item that is anticipated to be popular with users;
- Promote community partnerships to support on-site programmes for fitness classes and health and fitness education. Signage and downloadable content further expand utilisation through user guides and instructional videos; and
- Provide supporting infrastructure, such as drinking fountains, seating, shade and bike racks to cater for the needs of outdoor fitness equipment users.

4.6 Anticipated users of outdoor fitness equipment

Outdoor fitness equipment has the potential to be used by people of all ages and ability. The wide range of potential users includes:

- People undertaking personal training sessions, led by qualified personal trainers;
- Outdoor fitness training groups, comprised of people with varying levels of physical fitness;
- Individuals who are experienced in the use of outdoor fitness equipment and have their own training programme; and
- Less experienced and new users, who enjoy physical activity outdoors and are looking to utilise outdoor fitness equipment facilities.

4.7 Strategies to increase provision and use of facilities

To encourage use of outdoor fitness equipment, strategies that should be considered, include:

- Installing outdoor fitness equipment in locations that provide a safe setting with passive surveillance and on active pedestrian routes;
- Providing a variety of outdoor fitness equipment to accommodate a wide range of users, exercise types and skill levels;
- Providing signage indicating how the equipment can be used and what activities can be undertaken to encourage uptake by those that are unfamiliar with the use of outdoor fitness equipment.
- Installing facilities at parks with existing sports facilities;
- Installing facilities at parks located near to public transport hubs; and
- Locating outdoor fitness equipment near or install supporting infrastructure that enhance the experience, including: toilets, drinking fountains, seating and shelter.

5. Precedent study

5.1 Outdoor fitness equipment outside the LGA

A range of existing outdoor fitness equipment, within and outside the local government area, was reviewed as precedents in order to gain an accurate assessment of contemporary provision across Sydney.

5.2 How we assessed the precedents

The precedent study involved an initial desktop review followed by visits to individual sites and completion of an observation template [see Appendix 1]. The template was prepared to provide a succinct, quantitative description of each outdoor fitness equipment location. Observations regarding day and time, users, provision of equipment, supporting infrastructure and site selection were recorded for each site. The observation template aimed to find precedents that followed best-practice design principles for a quality facility.

The following outdoor fitness equipment were reviewed:

- Bondi Park, Bondi Beach;
- Waverley Park, Bondi;
- Garnet Jackson Reserve, Botany;
- Camperdown Park, Camperdown;
- Burrows Road, Clovelly;
- · Darling Quarter, Darling Harbour;
- Yarranabee Park, Darling Point;
- Glenmore Park Child and Family Centre, Glenmore Park;
- Rotary Park, Glenmore Park;
- Arthur Byrne Reserve, Maroubra Beach;
- Jarvie Park, Marrickville;
- Thornton Estate, Penrith;
- Queens Park, Queens Park;
- Rushcutters Bay Park, Rushcutters Bay;
- Jamison Park, South Penrith;
- The Domain, Sydney;
- · Bondi to Coogee Coastal Walk, Tamarama; and
- Christison Park, Vaucluse.

5.3 Results

The precedent study found other councils and authorities across Sydney were upgrading existing or installing new outdoor fitness equipment. With the increasing demand for access to free outdoor fitness equipment, a number of councils have set up initiatives for funding and promoting these facilities within their respective local government areas.

Based on the new outdoor fitness equipment inspected, the study found dynamic equipment favoured over static. However facilities often featured a mix of the two. The equipment was constructed of robust materials designed to handle often exposed locations and was finished with impact-attenuating rubber softfall throughout. The majority of facilities provided signage, seating and drinking fountains, and in some cases allowed for charging of mobile devices.

Observations taken from the precedent study were then compared with existing outdoor fitness equipment installed at sites currently managed by the City of Sydney.

5.4 Precedent study examples

Image	Name	Layout	Equipment type	Number of pieces of equipment	Exercise types	Range	Material	Accessible
	Bondi Park, Bondi Beach	Hub	Static	15	Aerobic Anaerobic Stability Flexibility	Beginner to advanced.	Painted timber posts and benches with marine grade stainless steel rails and caps.	Yes

Comments: Overall an excellent facility that meets the needs of the local community and the exposed coastal environment. It caters for a range of users, from the 'extreme fitness' of the Bondi Beach BAR Brutes community organisation to older, moderate exercisers. All user groups have been accommodated, with a diverse range of outdoor fitness equipment. It is located on an active pedestrian route. Good supporting infrastructure, but lacks shade and weather protection.

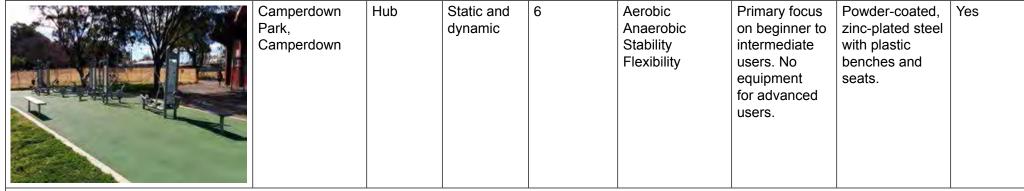


Burrows Park, Clovelly Hub Static and dynamic Static and dynamic Aerobic Stability Flexibility Primary focus on beginner to intermediate users. Limited equipment for advanced users. No No No No No No No No No N			11			•	
	-	Hub	12	Anaerobic Stability	on beginner to intermediate users. Limited equipment for advanced	marine grade stainless steel with plastic benches and	No

Comments: A good facility that offers a range of dynamic equipment focused on aerobic and some anaerobic exercise. Opportunities for other exercise types are provided through static equipment. Well equipped for beginner and intermediate users, but advanced users will find a lack of equipment. Located on an active pedestrian route. Lack of supporting infrastructure, shade and weather protection.

Image	Name	Layout	Equipment type	Number of pieces of equipment	Exercise types	Range	Material	Accessible
	Arthur Byrne Reserve, Maroubra Beach	Hub	Static and dynamic	9	Aerobic Anaerobic Stability Flexibility	Primary focus on beginner to intermediate users. Limited equipment for advanced users.	Powder-coated, zinc-plated steel with plastic benches and seats.	Yes

Comments: A good facility that offers a range of dynamic and static equipment focusing on anaerobic, stability and flexibility exercises. Well equipped for beginner and intermediate users, but advanced users will find a lack of equipment. Located on an active pedestrian route. Good supporting infrastructure (e.g. public toilets, drinking fountains, showers), but a lack shade and weather protection.



Comments: An average facility that offers a limited amount of equipment. While opportunities exist for all four exercise types, the facilities are relatively limited compared to others reviewed. There is no equipment for advanced users. Good supporting infrastructure, including some shade and weather protection.

Image	Name	Layout	Equipment type	Number of pieces of equipment	Exercise types	Range	Material	Accessible
	Eric Primrose Reserve, Rydalmere	Hub	Static and dynamic	6	Aerobic Anaerobic Stability Flexibility	Beginner to advanced.	Powder-coated galvanised steel with aluminium benches.	Yes

Comments: An average facility that offers a limited amount of equipment. While opportunities exist for all four exercise types, the facilities are relatively limited compared to others reviewed. There is some equipment for advanced users. Great supporting infrastructure, including seating under shelter.

6. Study of existing facilities

6.1 Study methodology

A review of existing outdoor fitness equipment provided within the City of Sydney LGA was undertaken to understand the number, range and quality of existing provision. When undertaking the study a number of assessments were carried out. These were adapted from the City of Sydney *Open space and recreation needs study* and included:

- A quantitative audit the number and area of outdoor fitness equipment facilities;
- A distribution assessment where the outdoor fitness equipment facilities were located;
- A diversity assessment the range of outdoor fitness equipment facilities provided;
- An accessibility audit how far people had to walk to outdoor fitness equipment and any barriers that inhibited access;
- A qualitative audit the appearance, condition and functionality of outdoor fitness equipment;
- Community consultation what people thought of outdoor fitness equipment facilities, and whether they met current and likely future needs (see Part 8 – Community consultation);
- Demographic analysis how projections for population growth and distribution affected provision of outdoor fitness equipment;
- An assessment of recreation trends; and
- Document review of City of Sydney and State Government plans and strategies that have implications for outdoor fitness equipment facilities, as well as an assessment of best-practice strategies developed in Australia and overseas.

These assessments identified:

- Gaps in the existing outdoor fitness equipment facilities network (see figure 46);
- Sites for potential installation of outdoor fitness equipment:
- Improvements needed to increase the use of existing outdoor fitness equipment facilities and to better meet the needs of the community at sites such as Observatory Hill and South Sydney Rotary Park.

Design guidelines were also developed for the appropriate siting, provision and management of outdoor fitness equipment to better meet existing and future needs of the community.

6.2 Study scope

The study was primarily focussed on public land, with unrestricted public access, which the City of Sydney owns, manages as a trustee or is responsible for care, control and management.

However, located within and directly adjacent to the City of Sydney LGA are parks and public open space managed by other authorities that need to be taken into account in determining community access and amenity. These include land under the management of:

- Sydney Harbour Foreshore Authority;
- Royal Botanic Gardens and Domain Trust;
- Centennial Park and Moore Park Trust;
- Roads and Maritime Services:
- State Rail Corporation;
- Department of Housing;
- Redfern Waterloo Authority;
- State Transit Authority;
- Sydney University; and
- Adjoining Councils.

Outdoor fitness equipment facilities managed by these authorities were considered in relation only to walking distance from City of Sydney managed facilities. Although these external facilities provide amenity for City of Sydney residents, workers and visitors, the City has no jurisdiction over the management of these facilities.

6.3 Location of existing facilities

The City has existing outdoor fitness equipment located at:

- Bicentennial Park, Glebe;
- Bourke Street Park, Woolloomooloo;
- Observatory Hill, Millers Point;
- Perry Park, Alexandria;
- Prince Alfred Park, Surry Hills;
- South Sydney Rotary Park, Eveleigh;
- Sydney Park, St Peters; and
- Wentworth Park, Glebe.

The location of these parks is shown in figure 44.

6.4 How we assessed existing facilities

Similar to the precedent study, assessment of the existing outdoor fitness equipment facilities managed by the City of Sydney began with a desktop study followed by visits to each site and completion of the observation template [see Appendix 1].

6.5 Results

The study showed a mix of existing outdoor fitness equipment facilities, ranging from safe, accessible, aesthetically pleasing, well provisioned and well maintained facilities to poorly provisioned and under-utilised facilities.

Results from both the precedent study and existing facilities study contributed to the development of the design guidelines and best-practice design principles in Part 4.5 of this plan.



Figure 11. - Existing outdoor fitness equipment in and around the City of Sydney LGA.

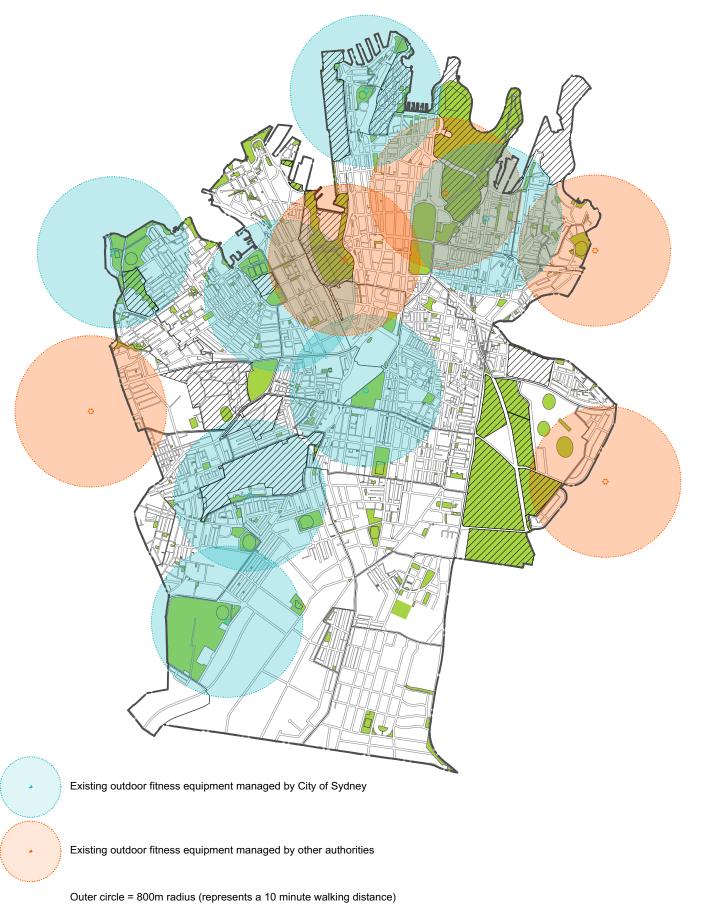


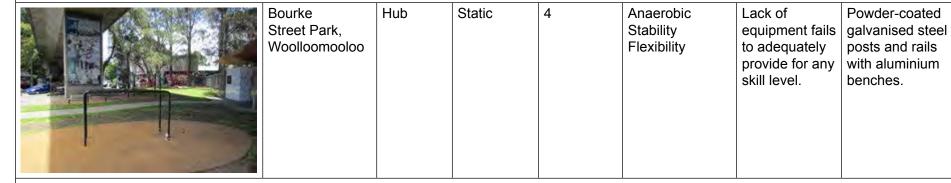
Figure 12. - Walking distance to existing outdoor fitness equipment in and around the City of Sydney LGA.

6.6 Existing facilities study examples

Image	Name	Layout	Equipment type	Number of pieces of equipment	Exercise types	Range	Material	Accessible
	Observatory Hill, Millers Point	Cluster	Static	12	Aerobic Anaerobic Stability Flexibility	Beginner to advanced.	Powder-coated galvanized steel posts and rails with plastic benches.	Yes

Comments: A good facility that offers a range of static equipment that is heavily used by individuals and outdoor fitness groups. Well equipped for beginner to advanced users. Located on an active pedestrian route. Good supporting infrastructure, including natural shade and weather protection. Heavy use has damaged surrounding turf and resulted in road being used for circuit training. Facilities could be upgraded and constructed of more robust materials and expanded to accommodate more users.

Yes



Comments: A poor facility with a lack of equipment and limited range for exercise types. Good supporting infrastructure, including public toilets. Located on an active pedestrian route. However, the area is susceptible to antisocial behavior and rough sleepers use the equipment for makeshift shelters. Rubber softfall does not cover a large enough area around equipment to protect surrounding turf from damage. Facilities could be upgraded or relocated to a more suitable location, with greater passive surveillance.

Image	Name	Layout	Equipment type	Number of pieces of equipment	Exercise types	Range	Material	Accessible
	Bicentennial Park, Glebe	Hub	Static	2	Anaerobic Stability Flexibility	Lack of equipment. Fails to adequately provide for any skill level.	Powder-coated galvanised steel posts and rails.	No

Comments: An extremely poor facility with very limited equipment and opportunities for exercise types. Good supporting infrastructure, including natural shade and weather protection. Some equipment is damaged and needs repair. Facilities could be significantly upgraded or relocated to a more suitable location with greater passive surveillance.



Comments: A good facility that offers a range of static equipment that is heavily used by individuals and outdoor fitness groups. Well equipped for beginner to advanced users. Located on an active pedestrian route. Good supporting infrastructure, including natural shade and weather protection. Trail layout allows for multiple groups to use the equipment at any one time.

Image	Name	Layout	Equipment type	Number of pieces of equipment		Range	Material	Accessible
	Prince Alfred Park, Surry Hills	Trail	Static	22	Aerobic Anaerobic Stability Flexibility	Beginner to advanced.	Powder-coated galvanised steel posts and rails with stained timber benches.	Yes

Comments: Overall an excellent facility that meets the needs of the local community with a diverse range of outdoor fitness equipment. Well equipped for beginner to advanced users. Located on an active pedestrian route. Good supporting infrastructure. Trail layout allows for multiple groups to use the equipment at any one time. Part of a broad range of sports facilities located within the park and well integrated to the site.

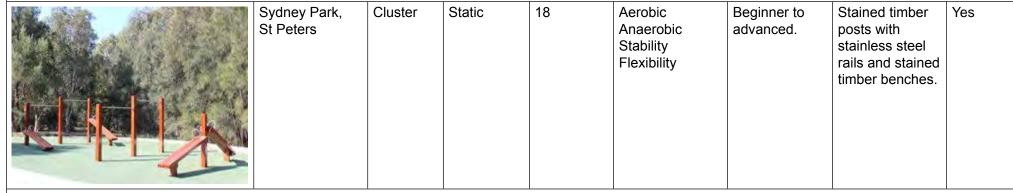


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Comments: A poor facility with a lack of equipment and limited range of exercise types. Lack of supporting infrastructure. Some shade and weather protection. Located on an active pedestrian route, but location is susceptible to antisocial behavior and vandalism. Facilities could be significantly upgraded or relocated to a more suitable location.

Image	Name	Layout	Equipment type	Number of pieces of equipment	Exercise types	Range	Material	Accessible
	Perry Park, Alexandria	Trail	Static	3	Anaerobic Stability Flexibility	Lack of equipment. Fails to adequately provide for any skill level.	Painted timber with galvanised steel rails and painted timber benches.	No

Comments: An extremely poor facility that has fallen into disrepair and is in serious need of removal or upgrade. Lack of equipment and limited range of exercise types. Minimal signs of use with poor passive surveillance. Good supporting infrastructure, including public toilets, shade and weather protection. Trail layout is ineffective with only one piece of equipment per station along the trail.



Comments: Overall an excellent facility that meets the needs of the local community with a diverse range of outdoor fitness equipment. Well equipped for beginner to advanced users. Located on an active pedestrian route. Good supporting infrastructure, including shade and weather protection. Cluster layout allows for multiple groups to use the equipment at any one time and is well integrated into the site. Catering for all abilities, equipment forms part of a comprehensive suite.

7. Selecting sites for new facilities

7.1 Exploring the gaps

The study of existing facilities identified gaps within the LGA that did not have outdoor fitness equipment within a 10-minute walking distance [figure 12.]. To assist in selecting potential sites for new facilities these gaps were organised into the following nine districts, which generally follow the zones developed for the City of Sydney Open Space and Recreation Needs Strategy:

- City East Elizabeth Bay / Woolloomooloo / Potts Point / Rushcutters Bay;
- Inner East Surry Hills / Darlinghurst / Paddington / Centennial Park;
- Inner South Redfern / Waterloo;
- South East Beaconsfield / Rosebery / Zetland;
- South West Alexandria / St Peters;
- Inner West Chippendale / Darlington / Erskineville / Eveleigh / Newtown;
- North West Annandale / Camperdown / Forest Lodge / Glebe;
- City West Pyrmont / Ultimo; and
- Central Business District Sydney / The Rocks / Dawes Point / Millers Point / Darling Harbour

7.2 Site assessment criteria

Once the nine districts had been defined, a desktop study identified parks and public open space owned and managed by the City that could potentially accommodate outdoor fitness equipment. Site visits and observation templates were then employed to assess each site.

It is neither practical nor desirable to locate outdoor fitness equipment in every public open space. Furthermore, there are a number of sites close to each other that could all accommodate new facilities. So in assessing locations for potential installation of outdoor fitness equipment, sites were ranked using a series of qualitative criteria. These included the strategic objectives; the design guidelines and best-practice design principles; information gathered in the precedent as well as existing City facilities studies.

The assessment also considered:

- Foreseeable adverse impacts on neigbours from locating fitness equipment in certain locations
- Whether the park or public open space was large enough to accommodate outdoor fitness equipment and if this would impact on other park functions and uses;
- Whether the site was readily accessible or any barriers such as busy roads or private
 property that adjoined much of the site. The proximity of an open space to public transport and
 bike paths was a prime consideration;
- The impact an equipment type or location would have on planning requirements such as classification of the development under the ISEPP;
- Whether the site already attracted people involved in physical activity;
- Other sites nearby that were more suited for outdoor fitness equipment;
- Whether locating equipment on an underutilised site could help to activate it;
- Levels or landform of a site that could make locating outdoor fitness equipment difficult;
- Heritage significance of the site and if changes would adversely impact on this;
- Recent upgrades and whether retrofitting outdoor fitness equipment would impact on the design or finishes:
- Known activities that occurred in an area that would lead to misuse of the equipment; and
- Impact of installing equipment on significant trees.

A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis was done, based on information from the site visits. The analysis was also informed by existing knowledge and experience of particular areas gathered by the City as well as community feedback.

The SWOT analysis defined:

- Strengths, as site characteristics that were an advantage:
- Weaknesses, as site aspects that were a disadvantage;
- Opportunities, as site elements that could be exploited to advantage; and
- Threats, as site elements that could directly or inadvertently result in problems or issues.

See Appendix 3 for the SWOT analysis.

7.3 Site selection ranking

Site assessment enabled a number of qualitative considerations to be utilised in order to rank site suitability. Sites within their respective districts were ranked as:

- Suggested location;
- Alternative location;
- Location less desirable; or
- Location not recommended.

Sites ranked as suggested locations should be the first sites chosen for installation of outdoor fitness equipment.

The prioritisation of these sites was informed by factors including:

- Community requests for facilities in specific areas;
- Other suitable locations within the vicinity;
- Issues that would impact on the cost of installation;
- Issues that would impact on the approvals to install the equipment; and
- Whether the site was readily accessible by public transport and the cycleway network.

7.4 Other considerations

Other specific considerations made when assessing sites included:

- Safety and security were there known or perceived issues with safety or antisocial behaviour? Could crime prevention through environmental design (CPTED) principles be applied;
- Lighting was there potential for facility specific lighting? Would lighting of the site cause a
 disturbance to adjoining residents; and
- Cycling network access does the site adjoin the City's cycleway network?

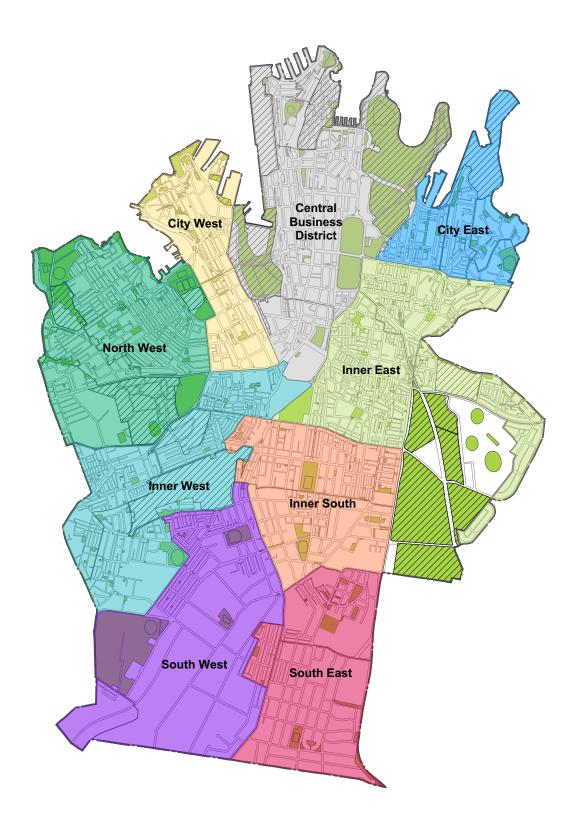


Figure 13. - City of Sydney LGA districts.

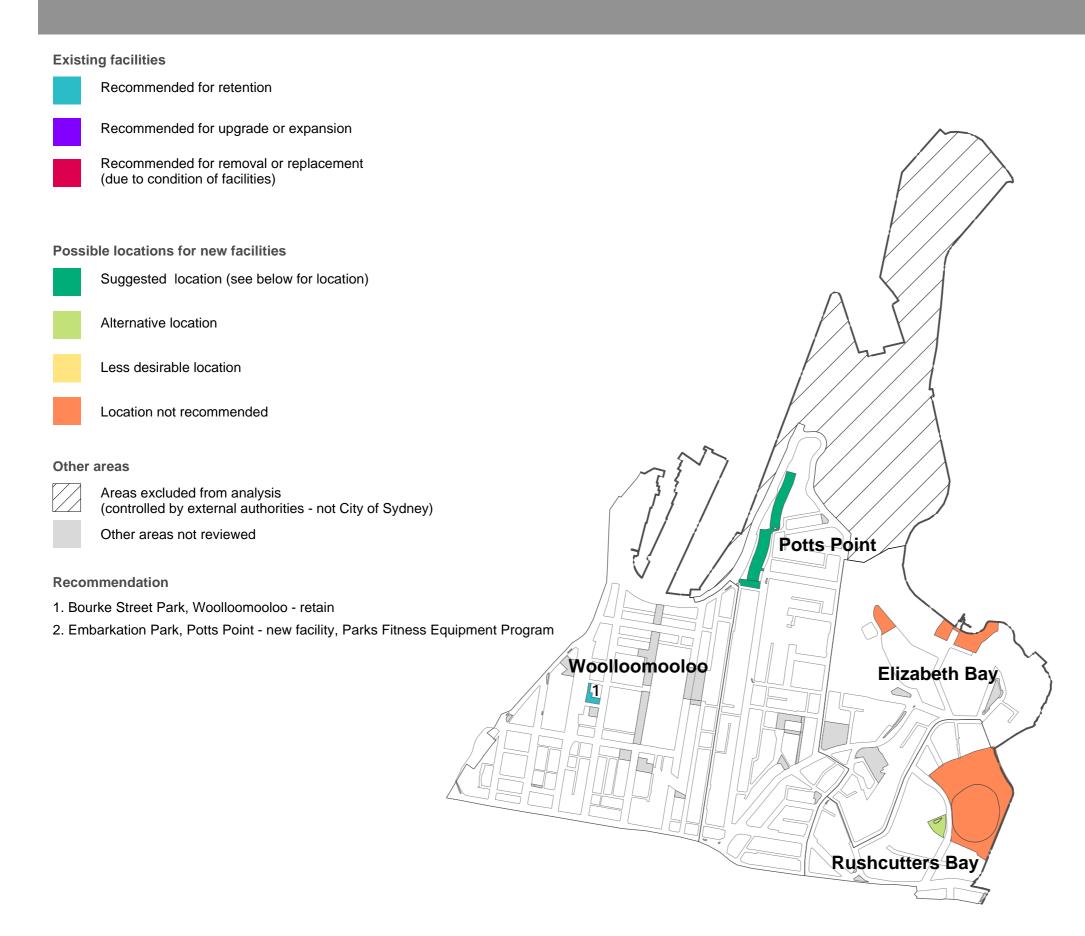


Figure 14. - City East district.



Figure 15. - Inner East district.

Existing facilities

Recommended for retention

Recommended for upgrade or expansion

Recommended for removal or replacement (due to condition of facilities)

Possible locations for new facilities

Suggested location (see below for location)

Alternative location

Less desirable location

Location not recommended

Other areas

Areas excluded from analysis
(controlled by external authorities - not City of Sydney)

Other areas not reviewed

Recommendation

1. Waterloo Park - new facility, Park Fitness Equipment Program.



Figure 16. - Inner South district.

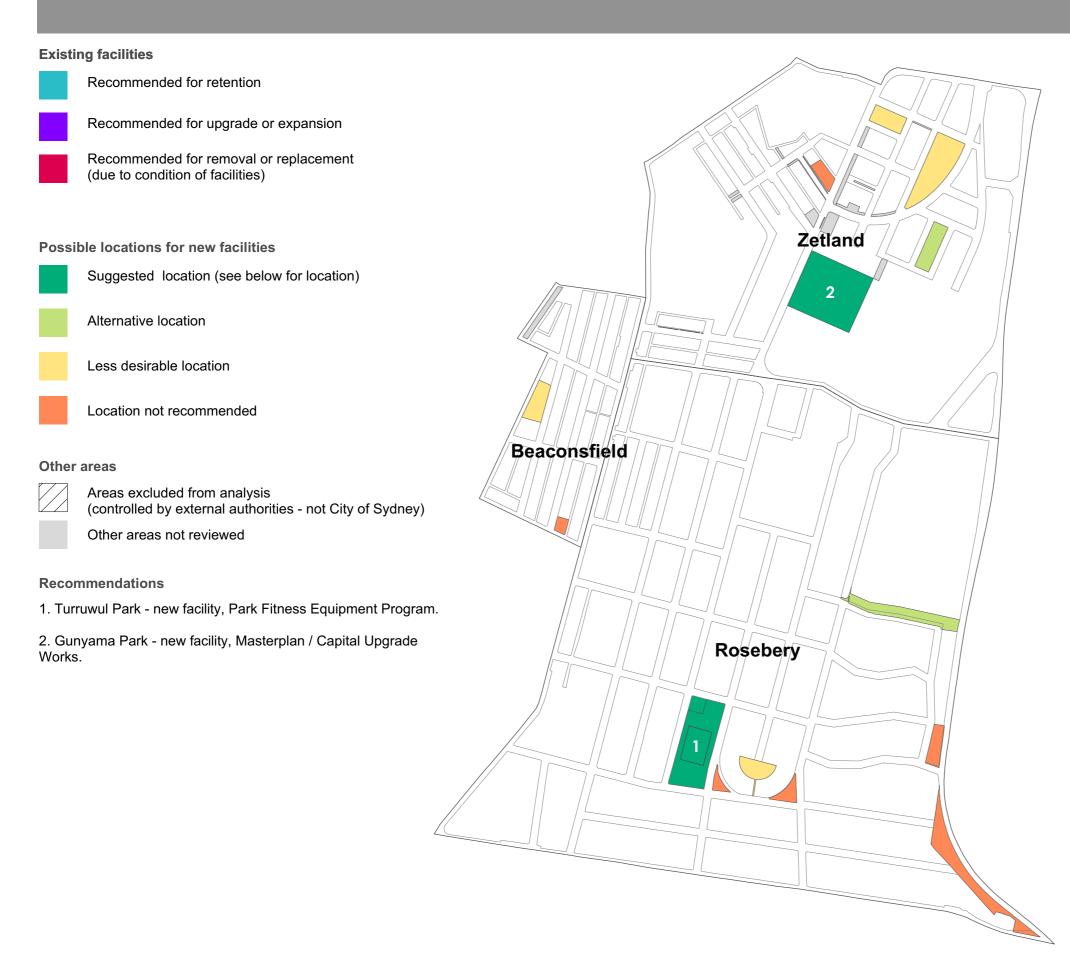


Figure 17. - South East district.

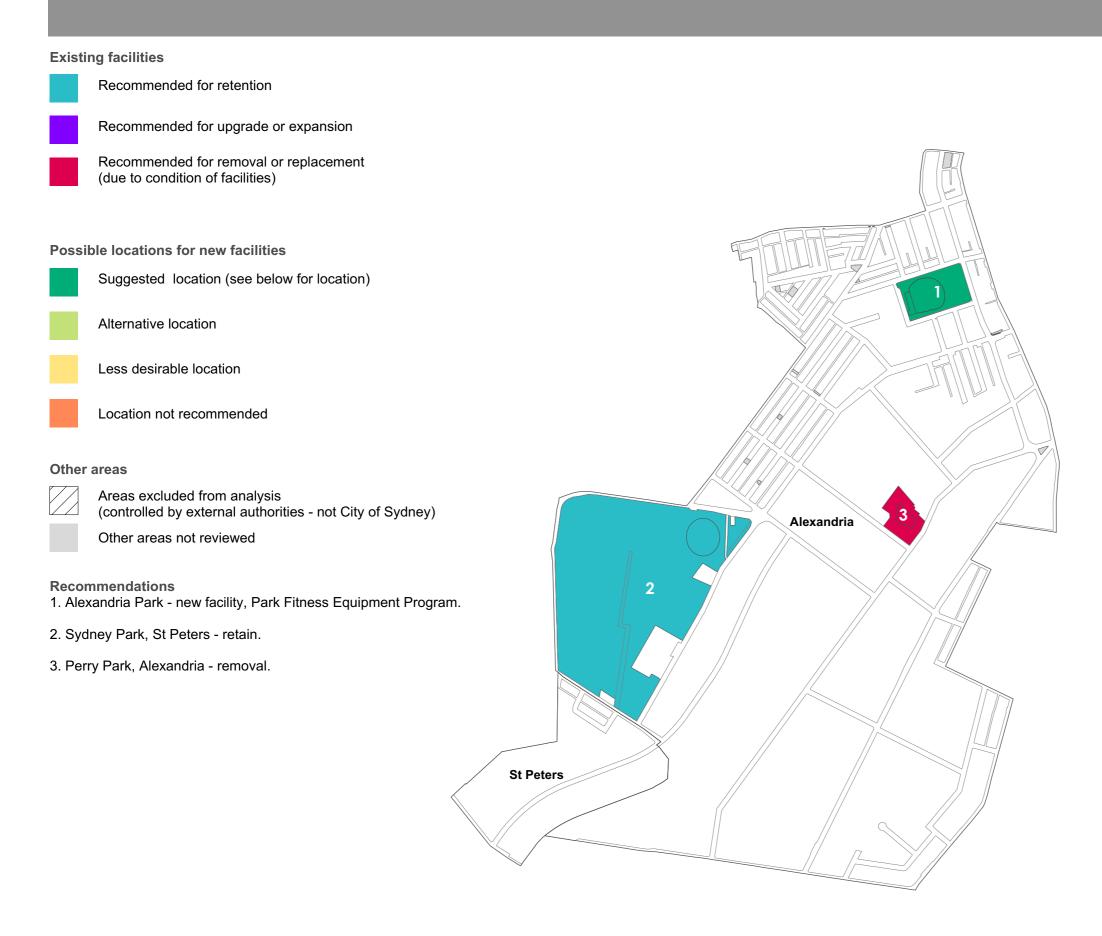


Figure 18. - South West district.

Existing facilities

Recommended for retention

Recommended for upgrade or expansion

Recommended for removal or replacement (due to condition of facilities)

Possible locations for new facilities

Suggested location (see below for location)

Alternative location

Less desirable location

Location not recommended

Other areas

Areas excluded from analysis (controlled by external authorities - not City of Sydney)

Other areas not reviewed

Recommendation

1. South Sydney Rotary Park - upgrade facility, Park Fitness Equipment Program.



Figure 19. - Inner West district.

Existing facilities

R

Recommended for retention

Recommended for upgrade or expansion

Recommended for removal or replacement (due to condition of facilities)

Possible locations for new facilities

Suggested location (see below for locations)



Alternative location



Less desirable location



Location not recommended

Other areas



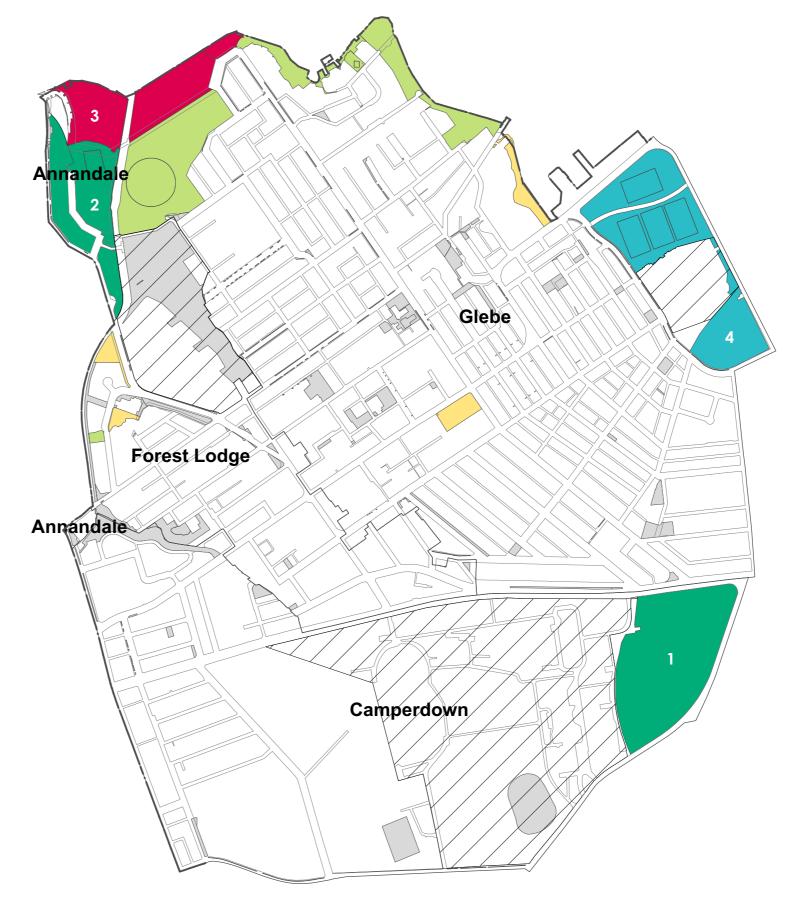
Areas excluded from analysis (controlled by external authorities - not City of Sydney)



Other areas not reviewed

Recommendations

- 1. Victoria Park new facility, Masterplan / Capital Works Upgrade.
- 2. Johnstons Creek Parklands new facility, Masterplan / Capital Works Upgrade.*
- 3. Bicentennial Park removal, replaced by new facility at Johnstons Creek Parklands.*
- 4. Wentworth Park, Glebe retain.



*Refer Johnstons Creek Parklands Masterplan.

Figure 20. - North West district.

Existing facilities Recommended for retention Recommended for upgrade or expansion Recommended for removal or replacement (due to condition of facilities) Possible locations for new facilities Suggested location (see below for location) **Pyrmont** Alternative location Less desirable location Location not recommended Other areas Areas excluded from analysis (controlled by external authorities - not City of Sydney) Other areas not reviewed Recommendation 1. Pirrama Park - new facility, Park Fitness Equipment Program. Ultimo

Scale 1:10000

Figure 21. - City West district.

Existing facilities Recommended for retention Recommended for upgrade or expansion Recommended for removal or replacement (due to condition of facilities) The Rocks Barangaroo Possible locations for new facilities Suggested location (see below for location) Alternative location Less desirable location Location not recommended Other areas Sydney Areas excluded from analysis (controlled by external authorities - not City of Sydney) Other areas not reviewed Recommendation 1. Observatory Hill Park, Millers Point - expanded facility, Park Fitness Equipment Program. Haymarket

Scale 1:15000

Figure 22. - City West district.

8. Community consultation

8.1 Background and objectives

Community consultation was carried out to provide a quantitative assessment of community views to feed into the decision-making process relating to new park fitness equipment around the City of Sydney LGA.

8.2 Research design

The City values input from the community to ensure that facilities provided meet people's expectations and satisfy needs. In March 2015, the City undertook intercept surveys at selected parks. As part of the survey by Woolcott Research and Engagement, 237 people were consulted in seven sites under consideration for the introduction or upgrade of outdoor fitness equipment. These were:

- 1. Pirrama Park, Pyrmont;
- 2. South Sydney Rotary Park, Eveleigh;
- 3. Waterloo Park, Waterloo;
- 4. James Hilder Reserve, Surry Hills;
- 5. Observatory Hill Park, Millers Point;
- 6. Alexandria Park, Alexandria; and
- 7. Turruwul Park, Rosebery.

In addition, one other park with existing fitness equipment was included - Wentworth Park, Glebe. The wording of questions was slightly different for community members interviewed in parks with existing equipment.

Interviewing was scheduled for a range of weekend and week days. It covered early morning (6-10am), midday (11am-2pm) and early evening (4-7pm) to capture an accurate reflection of the user-group demographic at these parks.

The surveys were undertaken to inform the community about the development of the plan and seek:

- Comments on how people currently use parks for physical recreation;
- Information on the types of fitness equipment and layout the community prefers;
- Comments and suggestions to enhance potential usability amongst park users.

Interviewees were shown images and diagrams of the types of outdoor fitness equipment and given descriptions of the City's goals and objectives in providing it.

Targeted questions to the respondents included:

- Reasons for visiting the park;
- Age group;
- Views on the suitability of the park for fitness equipment;
- Reasons why the park should not have fitness equipment;
- Whether they would use the equipment;
- Preference for type and layout of equipment; and
- What other facilities would be required alongside fitness equipment.

8.3 Summary of research outcomes

Overall, the idea of installing outdoor fitness equipment in parks was well received. The majority of respondents believed the parks were suitable for the installation of fitness equipment.

An average of 83 per cent of respondents perceived the park to be suitable for exercise equipment. James Hider Reserve and Turruwul Park were the locations where most respondents – 90 per cent – supported the installation of equipment. South Sydney Rotary Park had the lowest level of support – 68 per cent of respondents.

Respondents who did not support the installation of exercise equipment gave the following main reasons:

- The place was already too busy or there were too many things in the park;
- The park was too small, not flat or not the right place for equipment;
- They would rather keep the park guiet or did not want more people in the park; and
- They did not support installing equipment or did not believe that they would use it.

Equipment type

The feedback received showed that there is generally an equal preference for dynamic and static equipment. While these figures varied across the consultation locations, it does not show a majority support for one equipment type.

Therefore, we suggest that a combination of both dynamic and static equipment be installed if deemed suitable for the location and context of the site. This will enable further feedback to be obtained on preferences from those who use this equipment.

Equipment layout

The feedback received suggested that generally people prefer equipment to be located as part of a hub. Equipment in a cluster was the next preference, with a trail being the least favourite layout.

8.4 Group fitness training

In addition to the research in Part 8.3, The City also commissioned The Fitness Training Groups - Park User Perception Report in March 2015. This report outlines the perceptions of park users towards personal training groups in parks.

The report provided data collected from intercept surveys of park users at six parks:

- Cook and Phillip Park;
- Hyde Park;
- Observatory Hill Park;
- Redfern Park;
- Rushcutters Bay Park; and
- Sydney Park.

The report noted that respondents believed that personal training could present the following issues that impacted on other park users.

- Noise:
- Obstruction;
- Use conflicts;
- Aggressive or disrespectful behaviour;
- Commercialism;
- Damage; and
- Importation of equipment.

These issues and potential inadvertent impacts on other park and public open-space users should be considered when selecting where to locate outdoor fitness equipment.

9. Recommendations

The City aims to provide a number of new outdoor fitness equipment facilities across the local government area. We anticipate that this rollout will be scheduled over the next five years. To assist with prioritisation of the rollout, sites have been identified for the first stage of installations and will form the Park Fitness Equipment Program.

The proposed sites were chosen on the basis of site inspections and a qualitative assessment, as outlined in Part 7 of this plan. The selection was further informed by community consultation undertaken by the City in March 2015, as outlined in Part 8, and have been ranked in order of priority:

- 1. Turruwul Park, Rosebery
- 2. Alexandria Park, Alexandria
- 3. Waterloo Park, Waterloo
- 4. Observatory Hill Park, Millers Point (upgrade existing)
- 5. Pirrama Park, Pyrmont
- 6. South Sydney Rotary Park, Eveleigh (replace existing)

Running concurrently with the Park Fitness Equipment Program is the Masterplan/Capital Works Upgrade, which will see outdoor fitness equipment installed in conjunction with the parks identified above:

- Victoria Park, Camperdown (existing proposal);
- Johnstons Creek Parklands, Glebe (replace existing facilities at Bicentennial Park, Glebe);
- James Hilder Reserve, Surry Hills; and
- Gunyama Park, Zetland (existing proposal).

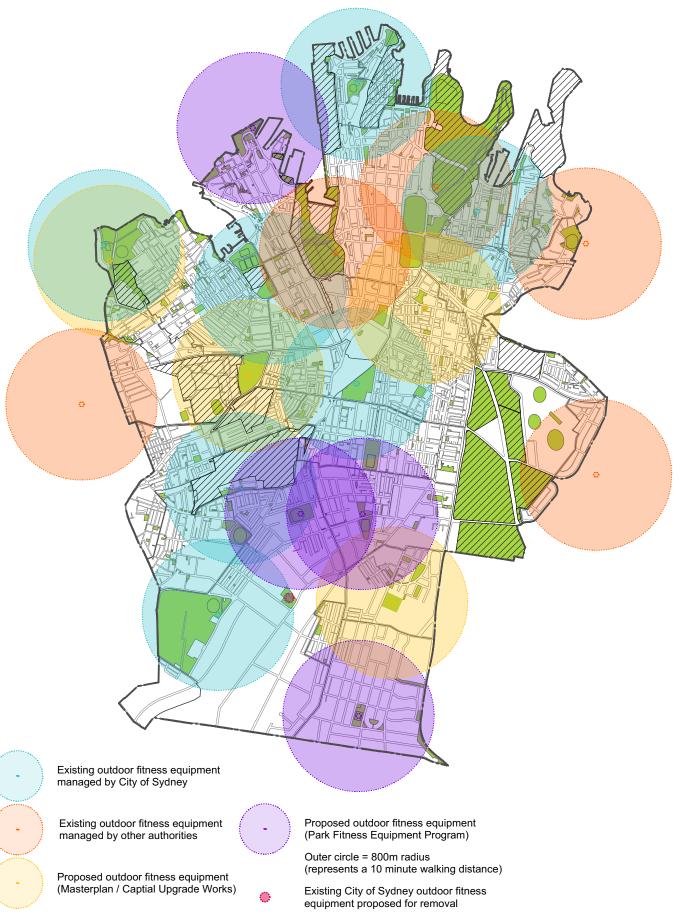


Figure 23. - Proposed network of outdoor fitness equipment.

9.1 Turruwul Park, Rosebery



Figure 24. - Turruwul Park proposed outdoor fitness equipment location. Scale 1:3000

- 1. Hub layout minimum 12 pieces of equipment.
- 2. Mix of dynamic and static equipment.
- 3. Include seating, signage, drinking fountain and appropriate supporting infrastructure.
- 4. Include impact-attenuating rubber softfall for equipment impact areas.
- 5. Retain all existing trees.



Figure 25. - Schematic design of proposed outdoor fitness equipment location. Scale 1:400

9.2 Alexandria Park, Alexandria



Figure 26. - Alexandria Park proposed outdoor fitness equipment location. Scale 1:3000

- 1. Hub layout minimum 12 pieces of equipment.
- 2. Mix of dynamic and static equipment.
- 3. Include seating, signage, drinking fountain and appropriate supporting infrastructure.
- 4. Include impact-attenuating rubber softfall for equipment impact areas.
- 5. Retain all existing trees.



Figure 27. - Schematic design of proposed outdoor fitness equipment location. Scale 1:400

9.3 Waterloo Park, Waterloo



Figure 28. - Waterloo Park proposed outdoor fitness equipment location. Scale 1:4500

- 1. Hub layout minimum 12 pieces of equipment.
- 2. Static equipment only.
- 3. Include seating, signage, drinking fountain and appropriate supporting infrastructure.
- 4. Include impact-attenuating rubber softfall for equipment impact areas.
- 5. Retain all existing trees. Include new shade trees.



Figure 29. - Schematic design of proposed outdoor fitness equipment location. Scale 1:400

9.4 Observatory Hill Park, Millers Point (upgrade existing)



Figure 30. - Observatory Hill Park proposed outdoor fitness equipment location. Scale 1:4500

- 1. Cluster layout minimum 4 pieces of equipment.
- 2. Static equipment only, with fixing points for external equipment.
- 3. Include seating, signage, drinking fountain and appropriate supporting infrastructure.
- 4. Include impact-attenuating rubber softfall for equipment impact areas.
- 5. Retain all existing trees.



Figure 31. - Schematic design of proposed outdoor fitness equipment location. Scale 1:800

9.5 Pirrama Park, Pyrmont



Figure 32. - Pirrama Park proposed outdoor fitness equipment location. Scale 1:3000

- 1. Cluster layout minimum 12 pieces of equipment.
- 2. Static equipment only.
- 3. Include seating, signage, drinking fountain and appropriate supporting infrastructure.
- 4. Include impact-attenuating rubber softfall for equipment impact areas.
- 5. Retain all existing trees.



Figure 33. - Schematic design of proposed outdoor fitness equipment location. Scale 1:400

9.6 South Sydney Rotary Park, Eveleigh (replace existing)



Figure 34. - South Sydney Rotary Park proposed outdoor fitness equipment location. Scale 1:3000

- 1. Hub layout minimum 8 pieces of equipment.
- 2. Static equipment only.
- 3. Include seating, signage, drinking fountain and appropriate supporting infrastructure.
- 4. Include impact-attenuating rubber softfall for equipment impact areas.
- 5. Retain all existing trees.



Figure 35. - Schematic design of proposed outdoor fitness equipment location. Scale 1:200

10. Implementation, monitoring and review

10.1 Implementation

The City anticipates installing additional fitness equipment facilities in parks and public open space over the next five years. The installation of outdoor fitness equipment is linked to the strategic objectives identified in Part 2 of this plan.

10.2 Monitoring

Monitoring of the critical impacts of the plan should be undertaken to ensure its objectives are fulfilled and community expectations are being met. The review and monitoring should:

- Consider new trends in exercise and outdoor fitness:
- Consider new equipment that may be developed by equipment suppliers;
- Take advantage of changes in demographics across the LGA and the associated need for physical recreation facilities; and
- Take advantage of new park or open space areas created within the LGA where new outdoor fitness equipment could be installed.

10.3 Review

We anticipate that the plan will be reviewed after a five-year period. The process would involve review against each strategic objective set out in Part 2, as well as the design considerations and best-practice design principles outlined in Part 4. Community consultation on outdoor fitness equipment could also be undertaken as part of the review.

What are measures for success of outdoor fitness equipment?

Measures to determine the success of facilities can be both subjective and objective:

Subjective measures include:

- Feedback from users through surveys and conversations to determine if the equipment fulfils their physical activity needs;
- Whether users have noticed an increase in their physical fitness from use of the new equipment;
 and
- Whether an increase of participation in physical activity has been observed at a particular locations as a result of the new equipment.

Objective measures include collection of physical data to determine:

- Whether the users are the intended demographic,
- Whether the facilities are used outside of the busiest periods of use (signalling that equipment is an attractor, not just the desire to exercise);
- The most commonly used pieces of equipment and types of exercises done on the equipment and in the space; and
- Whether sustained use of the facilities can be substantiated. Does the equipment remain popular and attracts users (and particularly return users) over the longer term?

10.4 Future Opportunities

Opportunities exist for the provision of additional information, over and above on-site signage. Possibilities include online footage about use of facilities, the provision of apps and other technology.

However, we need to consider whether the use of technology covers all intended participants and user demographics, particularly people in older age groups. Live on-site demonstrations and assistance at launches, plus regular programs or scheduled sessions with trainers can provide participants with personal guidance

and encouragement that technology would not. If the equipment is in an area, which intended users would visit regularly, then providing this hands-on assistance may have a longer term benefit.

The provision of fitness facilities across the LGA provides an asset for community use. To encourage patronage of facilities and greater participation in physical exercise, there are a number other opportunities that can be explored. These include:

- Mapping of facilities (in print and online) to provide the public with the location and types of facilities available – similar to the Sydney cycling guide + Map that indicates the layout of the cycleway network and provides quick tips for a safer cycling journey;
- Developing a social media page where the public can share training tips and organise informal training sessions:
- Developing community education sessions on fitness equipment use, similar to existing courses aimed at encouraging cycling;
- Developing community education sessions on exercise routines for total body fitness. This
 should include different routines that cover all exercise types and that are suitable for varied user
 groups;
- Facilitating the formation of community-based exercise groups, similar to the formation of community garden groups. This could include providing initial support for group setup, advice on the importance of warm-up and cool-down techniques, the importance of hydration (drinking) during exercise and suggested workout routines;
- Organising exercise groups as part of existing community services, for example as part of
 mothers' groups, seniors' groups and after-school care. This would also enable targeted
 exercises to be developed for the specific audiences;
- Encouraging groups using other City sports facilities to combine the use of fitness facilities into their training routine;
- Developing a policy and informing the community that exclusive use of facilities by groups or individuals is not supported. This will help to prevent the facilities becoming monopolised by regular users, who may obstruct or deter others from using them. It would also negate the requirement to develop a booking system for exclusive use of facilities; and
- Developing and promoting nutrition information, encouraging people to eat well and maintain a healthy weight in association with physical activity.

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Appendices

Appendix 1. SWOT analysis

Appendix 1: SWOT analysis

Park	Strengths	Weaknesses	Opportunities	Threats
City East				
Rushcutters Bay Park	Capacity for outdoor fitness equipment. Located on active pedestrian routes. Currently used for physical activity. High levels of existing use.	Off-leash dog park. Existing outdoor fitness equipment located in Woollahra Council controlled section of park.	A small hub, cluster or trail could be installed.	Exposed coastal location. Possible conflict between off-leash dog walkers and their pets and people using equipment.
Waratah Street Reserve Playground	Located on active pedestrian routes. Good passive surveillance.	Limited capacity for outdoor fitness equipment.	A small hub could be installed. Site adjoins Rushcutters Bay Park and could be used as an alternative location for equipment.	Locating outdoor fitness equipment near a playground could result in children using equipment for play.
Embarkation Park, Potts Point	Capacity for outdoor fitness equipment. Located on active pedestrian routes. Located adjacent to high density housing.	The site is secured at night, limiting access to facilities.	A small hub or trail could be installed.	The site is not exclusively controlled by the City of Sydney. Landowners consent would be required.
Inner South				
Corning Park	Good passive surveillance. High levels of existing use.	Most areas of the site have designated functions. Limited capacity for outdoor fitness equipment.	A small hub could be installed.	
Redfern Park	Good passive surveillance. Capacity for outdoor fitness equipment. Located on active pedestrian routes. Currently used for physical activity. High levels of existing use.	Most areas of the site have designated functions.	A hub, cluster or trail could be installed.	Potential conflict with high demand for event and passive recreation activities.
Waterloo Oval	Currently used for physical activity. High levels of existing use.	Most areas of the site have designated functions. Limited capacity for outdoor fitness equipment.	A small hub may be located on the western side of the site.	

Waterloo Park	Capacity for outdoor fitness equipment. Currently used for physical activity.	Lack of passive surveillance.	A hub or cluster could be installed. Outdoor fitness equipment could help activate the park. Site adjoins Waterloo Oval and could be used as an alternative location for equipment.	
Inner West				
Albert Reserve	Good passive surveillance.	Limited capacity for outdoor fitness equipment.	A small hub could be installed. Outdoor fitness equipment could help activate the park.	High visibility from passing traffic may deter some users.
Green Bans Park		Limited capacity for outdoor fitness equipment.	A small hub could be installed.	Dive-bombing by magpies is known to occur during breeding season. Previous impact on park users has been noted.
Harry Noble Reserve	Capacity for outdoor fitness equipment. Currently used for physical activity. High levels of existing use. Located near other community facilities.	Off-leash dog park.	A hub, cluster or trail could be installed. Site adjoins Erskineville Oval and could be used as an alternative location for equipment.	
Erskineville Oval	Currently used for physical activity. High levels of existing use.	Most areas of the site have designated functions. Limited capacity for outdoor fitness equipment.	A small hub could be installed.	
Lilian Fowler Reserve		Most areas of the site have designated functions. Limited capacity for outdoor fitness equipment.	A small hub could be installed.	Recently upgraded, retrofitting outdoor fitness equipment could impact park design or finishes.
Mrs Isabella Hills Rest Area		Most areas of the site have designated functions. Limited capacity for outdoor fitness equipment. Proximity to residences.	A hub or cluster could be installed. Outdoor fitness equipment could help activate the park.	

Solander Park	Capacity for outdoor fitness equipment.	Lack of passive surveillance. Proximity to existing outdoor fitness equipment at South Sydney Rotary Park.	A small hub could be installed. Outdoor fitness equipment could help activate the park.	
Inner East				
Eddie Ward Park	Located on active pedestrian routes. Currently used for physical activity. High levels of existing use. Located adjacent to high density housing.	Most areas of the site have designated functions. Limited capacity for outdoor fitness equipment.	A small hub could be installed.	
Harmony Park	Good passive surveillance. Capacity for outdoor fitness equipment. Located on active pedestrian routes. Currently used for physical activity. High levels of existing use.	Highly used off- leash dog park. Proximity to residences.	A hub or cluster could be installed. Installation of outdoor fitness equipment would relieve other park infrastructure (seats, fences and gates) from use for exercise.	Possible conflict between off-leash dog walkers and their pets and people using equipment.
James Hilder Reserve	Good passive surveillance. Located on active pedestrian routes. Currently used for physical activity. High levels of existing use.	Proximity to residences. Limited capacity for outdoor fitness equipment.	A small hub could be installed. Site adjoins Harmony Park and could be used as an alternative location for equipment. Installation of outdoor fitness equipment would relieve other park infrastructure (seats, fences and gates) from use for exercise.	
City West				
Giba Park		Most areas of the site have designated functions. Lack of passive surveillance. Limited capacity for outdoor fitness equipment.	A small hub or cluster could be installed.	

North West				
Blackwattle Bay Park	Good passive surveillance. Capacity for outdoor fitness equipment. Located on active pedestrian routes. Currently used for physical activity. High levels of existing use.	Heritage and curtilage of Bellevue House. Proximity to residences.	Outdoor fitness equipment could complement popular walking and running route.	Exposed coastal location.
Johnston's Canal	Capacity for outdoor fitness equipment. Located on active pedestrian routes. Currently used for physical activity.	Proximity to residences.	A small hub could be installed.	
Jubilee Park	Capacity for outdoor fitness equipment. Located on active pedestrian routes. Currently used for physical activity.		A hub, cluster or trail could be installed. Installation of outdoor fitness equipment would relieve other park infrastructure (seats, fences and gates) from use for exercise.	
South West				
Alexandria Park	Good passive surveillance. Capacity for outdoor fitness equipment. Located on active pedestrian routes. Currently used for physical activity. High levels of existing use.		A hub, cluster or trail could be installed. Installation of outdoor fitness equipment would relieve other park infrastructure (seats, fences and gates) from use for exercise.	
Jack Shuttleworth Reserve	Located on active pedestrian routes. Good passive surveillance.	Limited capacity for outdoor fitness equipment.	A small hub could be installed.	
South East				
Beaconsfield Park	Currently used for physical activity.	Limited capacity for outdoor fitness equipment.	A small hub could be installed.	Impact on other park users or functions.

Crete Reserve	Capacity for outdoor fitness equipment.	Poor passive surveillance. Low levels of existing use.	A hub or cluster could be installed.	Concealed location and lack of passive surveillance could limit the number of potential users.
Kimberley Grove Reserve	Capacity for outdoor fitness equipment.	Lack of supporting infrastructure.	A hub, cluster or trail could be installed.	
Turruwul Park	Good passive surveillance. Capacity for outdoor fitness equipment. Currently used for physical activity. High levels of existing use.		A hub, cluster or trail could be installed.	
Joynton Park	Good passive surveillance. High levels of existing use.	Limited capacity for outdoor fitness equipment.		Conflicts between dog walkers, fitness training groups and surrounding residents have been noted.
Mary O'Brien Reserve	Good passive surveillance. Capacity for outdoor fitness equipment.			Recently upgraded, retrofitting outdoor fitness equipment could impact park design or finishes.
Nuffield Park	Good passive surveillance.	Limited capacity for outdoor fitness equipment.	The hit-up wall area could be replaced by a large hub.	Previous noise complaints from nearby residents about park activity.
Tote Park	Good passive surveillance.	Limited capacity for outdoor fitness equipment.	A small hub or cluster could be installed.	